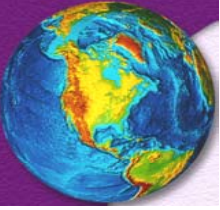




National Nuclear Security Administration

Office of
Export Control Policy and Cooperation
NA-242

Adam M. Scheinman
Director
(202) 586-2331



OFFICE OF DEFENSE NUCLEAR NONPROLIFERATION (NA-20)

Defense Nuclear Nonproliferation
Kenneth E. Baker
Deputy Administrator

**Nonproliferation
Research & Engineering**
Gerald P. Kiernan, PhD, Acting
Assistant Deputy Administrator
NA-22

**International Nuclear
Safety & Cooperation**
James M. Turner, PhD
Assistant Deputy Administrator
NA-23

Fissile Materials Disposition
Ed Siskin, Acting
Assistant Deputy Administrator
NA-26

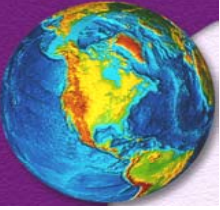
**Nonproliferation &
International Security**
Steven Black, Acting
Assistant Deputy Administrator
NA-24

**Materials Protection &
Emergency Management**
David Huizenga
Assistant Deputy Administrator
NA-25

Nonproliferation Policy
Trisha Dedik, Director
NA-241

**Export Control Policy
and Cooperation**
Adam Scheinman, Director
NA-242

International Safeguards
Ron Cherry, Director
NA-243



NA-242: Technical Lead on Nuclear Technology for USG

Functional Overview

Domestic Controls

DOE Complex

- Sensitive Subjects/
Countries Lists
- Foreign Travel
- Foreign Visits &
Assignments
- CRADAs
- NCI/IPP

Industry

- Part 810
Authorizations
- Munitions
- Dual-Use
- U.S. Customs –
Training, and
Support

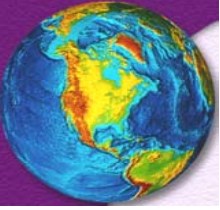
International Controls

Multilateral

- NSG
- Zangger Cmtee
- Wassenaar Arrgmt.
- Iraq Nuclear
Verification Office
- Add'l Protocol
- NPT Revcon

INECP

- Russia/NIS
- Middle East/SAsia
- East Asia
- Latin America
- Southern Europe



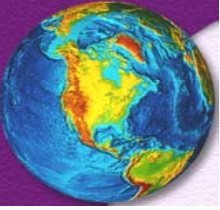
OVERVIEW

- Licensing:
 - Areas of Responsibility
 - DECATS
 - Export Controlled Information
 - Technology Transfer
 - Surplus Material
 - Industry Export Control
 - U.S. Customs
 - Initiatives
 - Areas for Assistance
- Multilateral:
 - Areas of Responsibility
 - Multilateral regime support
 - NSG
 - NPT
 - Technical Projects
- International Export Control Assistance:
 - Areas of Responsibility
 - INECP
- Forward Thinking



National Nuclear Security Administration

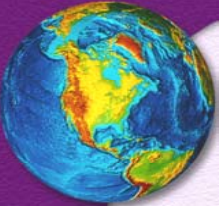
Licensing



Licensing Team

Areas of Responsibility

- Industry
 - Part 810 authorizations
 - Dual-use export licensing:
 - 30-day review of nuclear, missile, and chem/bio
 - Nuclear related munitions licensing
 - Assurance requests for NRC exports
- Nuclear safety
- Export Controlled Information
- U.S. Customs
- DOE Complex
 - Sensitive Subjects/Countries Lists
 - Foreign travel by DOE scientists and engineers
 - Foreign national visits and assignments
 - International agreements (IPP/NCI)
 - Exports by MPC&A program
 - Nuclear software
 - Transfer of surplus property
 - “Deemed exports”
 - DOE publications/conference papers
 - “Pit-out” reviews



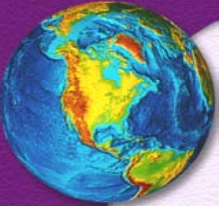
DOE Export Control Awareness Training (DECAT) System (Under Development)

Purpose:

- Counter spread of weapons of mass destruction
- Serve domestic and international export control and nonproliferation training needs
- Provide an on-site awareness training of export control requirements
- Test user's knowledge of export control regulations and policy
- Serve as early warning proliferation indicator

Features:

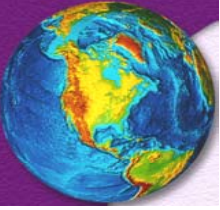
- Consistent information to all sites
- Enhances sites that lack own training capabilities
- Compliance reporting capability
- Training scheduled to user's convenience reaches a wider audience
- Documentation of material presented
- Leverages infrastructure resources



Export Controlled Information (ECI)

Export Controlled Information (ECI) - Technical information in the areas of development, production and use whose export requires a license

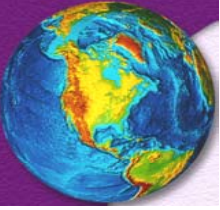
- ECI should be protected if uncontrolled dissemination would adversely affect U.S. national security or nonproliferation objectives
- DOE policy on dissemination of ECI must balance commitments to:
 - U.S. nonproliferation and national security goals
 - Scientific and technological advance
 - Benefit to U.S. industry
 - Benefit to U.S. taxpayer
 - Freedom of Information Act (FOIA) requirements



Export Controlled Information (ECI)

ECI (continued):

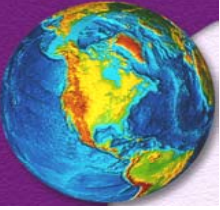
- Restricting release of ECI:
 - Publications:
 - Edit sensitive data
 - Limit distribution
 - Presentations:
 - Edit sensitive data
 - Limit audience



Export Controlled Information (ECI)

ECI (continued):

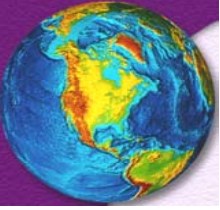
- NA-242 initiatives to control release of ECI under FOIA:
 - Again proposed legislation for DOE, similar to DOD's which was established in 1984, and working to protect as UCNI with SO Working Group on UCNI topical guideline draft
 - A requestor for ECI under FOIA is required to identify his/her citizenship and nationality as a condition for release
 - A requester, who is a U.S. citizen, should be advised of the requirements for an export authorization or license, if the released ECI will be sent out of the country
 - When a document is subject to a license from DOC or DOS, the requester should be directed to those Departments
 - Although enactment of legislation provides a choice to DOE on whether to release, its passage is doubtful this year



Technology Transfer Control

Objectives:

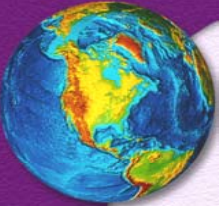
- To identify materials, equipment, and technology of proliferation concern
- To prevent transfers to proliferants
- To protect against inadvertent transfers
- To weigh proliferation and security concerns against value of scholarship, technology advance, and economic benefit
- To implement U.S. Government policy on transfers of materials, equipment, and technology



Technology Transfer Control

Mechanisms of Transfer:

- Sales, donations, loans, leases, exports
- Technical exchanges and communications
- Work-for-others, Cooperative Agreements, patent assignments
- Publications and presentations
- Visits and assignments to DOE sites
- Foreign travel by DOE personnel



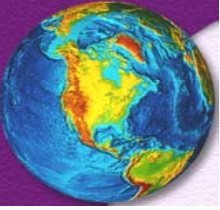
Technology Transfer Control

Transfer Control Principle:

- Whatever the transfer mechanism, export control review is a must

Control Measures:

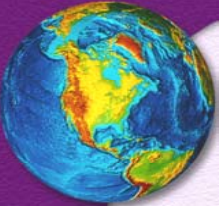
- Export control review of all proposed transfers, exchanges, publications, presentations, visits and assignments, and foreign travel
- Export control requirements placed in all transfer agreements
- DOE/NNSA approval required for retransfers



Technology Transfer Control

Tools for Export Control Review:

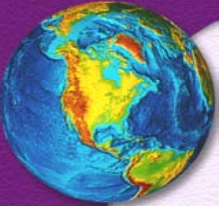
- Nuclear Suppliers Group (NSG) lists – Trigger and Dual-Use
- Export control regulations – Departments of Energy, Commerce, and State, and Nuclear Regulatory Commission
- DOE/NNSA
 - Guidelines on Export Control and Nonproliferation
 - Sensitive Countries List
 - Sensitive Subjects List
 - Technology experts and export control personnel



Surplus Property

Transfer of Surplus Property:

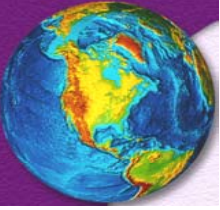
- Equipment and materials must be made useless for nuclear purposes
- Transfer agreement must include strict nonproliferation conditions
- There is a presumption of destruction for NSG Trigger list items and for weapons components
- For items deemed too valuable to destroy:
 - Request exception from DOE/NNSA Deputy Administrator for Defense Nuclear Nonproliferation
 - May require modifying equipment to render it useless for nuclear purposes
 - Must get DOE/NNSA approval for retransfer or export



Industry Export Control

Dual-Use Export Licensing:

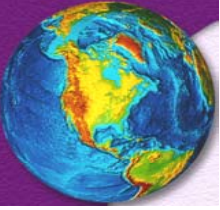
- Export Administration Act of 1979 gives Commerce the lead
- Export Administration Regulations (EAR) implements
Sections of note:
 - 15 CFR Part 738, Special Country Policies
 - 15 CFR Part 742, Control Policy -- CCL Based Controls
 - 15 CFR Part 744, Control Policy -- End-User and End-Use Based Catch-All Controls
 - 15 CFR Part 752, Special Comprehensive Licenses
 - 15 CFR Part 774, Commerce Control List (includes Nuclear Referral List)



Industry Export Control

Munitions Licensing:

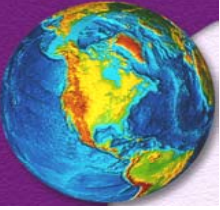
- Under jurisdiction of the Department of State, Office of Defense Trade Controls
- International Traffic in Arms Regulations, 22 CFR Part 121
- DOE reviews nuclear-related cases
 - Category V - Explosives, Propellants, Incendiary Agents
 - Category XVI - Nuclear Weapons Design and Test Equipment
- Authority
 - Arms Export Control Act 1976
- Review process similar to dual-use cases, except without time limits or escalation



Industry Export Control

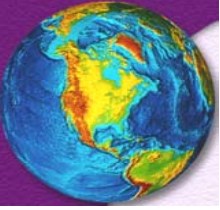
NRC Exports:

- Nuclear exports requiring special or general licenses
- 10 CFR Part 110
- Authority
 - Atomic Energy Act of 1954
- DOE assists NRC in securing assurances from foreign governments that exports of nuclear materials and equipment will be for peaceful uses
- DOE provides general license request confirmations



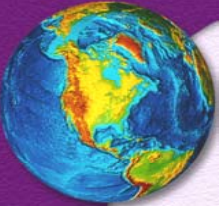
Homeland Security: U.S. Customs

- NA-242 and the Office of Strategic Investigations, U.S. Customs are working together to establish cooperative export control activities to match the technical capabilities of DOE/NNSA and the law enforcement responsibilities of U.S. Customs
- Activities identified support U.S. Customs in training and technology analysis and assistance in promoting weapons of mass destruction export controls, and U.S. industry outreach



Export Control Initiatives

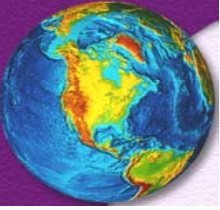
- Maintenance of the DOE/NNSA Guidelines on Export Control and Nonproliferation
- Export control training seminars for industry, academia, and federal government agencies
- Maintenance of Proliferation Information Network System (PINS)
- DOE Export Control Awareness Training (DECAT) System



Export Control Initiatives

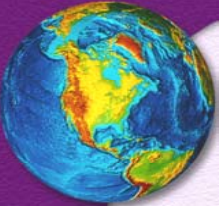
continued:

- Review and recommendation for approval of all technology transfer cases referred to DOE by the Departments of Commerce and State.
- Participation in the DOC Bureau of Export Administration Operating Committee on export policy and the Assistant Secretary level Advisory Committee for Export Policy (ACEP)
- Participation in the annual Export Control and Coordination Organization (ECCO) seminars
- Participation in the Property Management Course, Nonproliferation and National Security Academy, Albuquerque, July 16-17



AREAS FOR ASSISTANCE

- Continue to maintain existing and developed new expertise necessary to support NA-242 initiatives in missile and chem/bio technology transfers
- Incorporate export licensing and nonproliferation awareness into security briefings for new personnel
- Provide guidance for “deemed exports” and ECI applicability review for foreign national visits and assignments and foreign travel by federal and contractor personnel
- Target professional societies and groups of industry for nonproliferation awareness training with U.S. Customs
- Actively participate in Nuclear Nonproliferation Workshops and Seminars



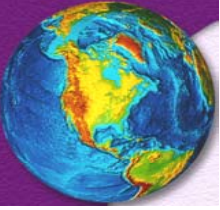
Nuclear Nonproliferation Seminars FY 2003

- HQ (Unclassified) – November 5-7 and June 24-26
- LANL – December 9-13 (Q level) and April 28-May 2 (Secret level)
- LLNL – February 25-28 (Secret Level)
- ORNL – January 28-31 (Q level)
- SRS – March 18-20 (Secret and some Q level)



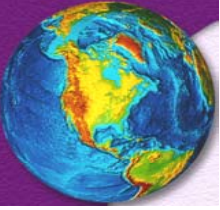
National Nuclear Security Administration

Multilateral



Multilateral Team – Areas of Responsibility

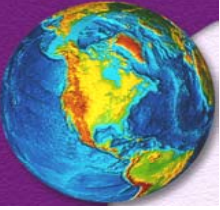
- Multilateral Team – Areas of Responsibility
- **Multilateral Regime Support**
 - Nuclear Suppliers Group
 - NPT Export Committee (Zangger)
 - Wassenaar Arrangements
 - International Atomic Energy Agency (IAEA)
 - NPT Review Conference – 2005
 - IAEA Additional Protocol (AP)
 - Iraq Nuclear Verification Office (INVO)
 - Joint Standing Committee on Nuclear Export Cooperation (JSCNEC)
- **Proliferation Research Assessment Program (PRAP) Studies**
- **Technical Projects**
 - Stockpile Stewardship
 - Characterization of DOE Complex
 - Nuclear Propulsion
 - Machine Tools
 - SNET List Review
 - Technical Review Group Peer Review
 - Commercialization of DOE lab technology (CRADAs)
 - Conversion Technology
 - Plutonium Isotope Separation
- **Other Issues**
 - Export Control Seminars
 - Bilateral Discussions
 - Procurement Watchlists
 - Full Scope Safeguards



Multilateral

Purpose:

- Prevent the proliferation of nuclear weapons by:
 - delaying a nuclear program and allowing other means, such as diplomacy, to help;
 - causing an end-user to accept a less capable and more costly option; and
 - allowing for countries to take a principled position on nuclear nonproliferation

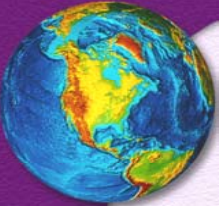


Multilateral

Strategies:

- Strengthen the multilateral supplier regimes through continued U.S. technical leadership
- Cooperate with the U.S. interagency, DOE and NNSA offices, and like-minded multilateral partners to promote peaceful nuclear trade and nonproliferation objectives
- Promote adherence to multilateral nuclear supplier arrangements in support of USG nonproliferation policy
- Ensure that the NNSA program offices and contractors are fully apprised of all multilateral commitments and obligations

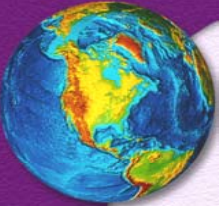
Strategies



Multilateral

Mission:

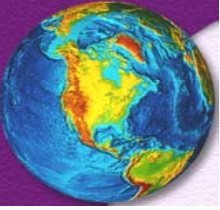
- Initiate studies on rapidly developing technologies and issues
 - Technical studies: Accelerator Production of Tritium; Naval Reactor Technologies; Tritium Operations, Proliferation Risks
 - Proliferation Research Assessment Program (PRAP) Studies
- Strengthen export controls through bilateral and multilateral dialogue.
- Pursue an active role in preventing proliferation.
- Protect U.S. national security interests and peaceful nuclear trade.
- Promote multilateral efforts to counter nuclear terrorism.



Multilateral

Role of NA-242:

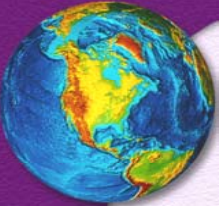
- Multilateral Regime Support
 - Nuclear Suppliers Group (NSG)
 - NPT Export Committee (Zangger)
 - International Atomic Energy Agency (IAEA)
 - Wassenaar Arrangements
 - Additional Protocol (AP)
 - Joint Standing Committee on Nuclear Export Cooperation
- Technical Team Projects
 - Stockpile Stewardship, Characterization of the Complex
- Other Issues
 - Export Control Seminars
 - Bilateral discussions and cooperation (I.e., JSCNEC)



Nuclear Suppliers Group (NSG)

NA-242 Participation:

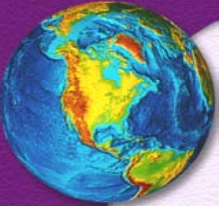
- Consultative Group (U.S. Chair)
- Information Exchange Meetings
- Licensing and Enforcement Experts Meetings
- Annual NSG Plenary (2003: Pusan, South Korea)



INTERNATIONAL TECHNICAL SUPPORT Nuclear Suppliers Group (NSG)

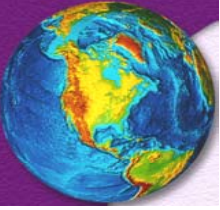
Membership (40 countries):

Argentina	Germany	Portugal
Australia	Greece	Romania
Austria	Hungary	Russia
Belarus	Ireland	Slovakia
Belgium	Italy	Slovenia
Brazil	Japan	South Africa
Bulgaria	<u>Kazakhstan</u>	Spain
Canada	Korea, Republic of	Sweden
Cyprus	Latvia	Switzerland
Czech Republic	Luxembourg	Turkey
Denmark	Netherlands	Ukraine
Finland	New Zealand	United Kingdom
France	Norway	United States
	Poland	



NTP Exporters (Zangger) Committee

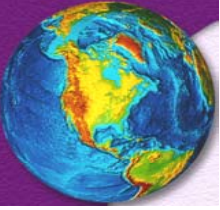
- Conversion Technology
 - successfully completed
 - led by NA-242
- Plutonium Isotope Separation
 - on going
 - NA-242 provides technical lead
- Full Scope Safeguards
 - U.S. member of Friends of Chair Committee to examine issue
- Next NPT Revcon – 2005
 - U.S. member of Friends of Chair Committee to examine issue



Technical Projects

Examples of NA-242 / Multilateral Team Technical Projects:

- Stockpile Stewardship
- Collaboration with the UK on Machine Tools and SNET List Review
- Nuclear Propulsion
- Characterization of the DOE Complex
- Machine Tools
- Commodity Analyses
- Procurement Watchlists
- PRAP Studies

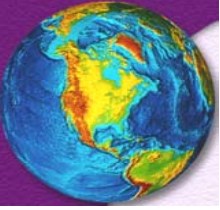


Proliferation Research Assessment Program (PRAP)

- New (FY03) initiative to analyze timely nonproliferation issues and challenges
- Focuses on weak spots, emerging technologies, and practical obstacles which could be used by proliferators
- Broad-based, with regional and global implications
- FY03 globalization PRAP studies: trade-flow study, economic profiles of sensitive commodities, financial resources needed to build a weapon, etc.
- Provides **proactive** tools and strategies



International Nuclear Export Control Program (INECP)



International Nuclear Export Control Program (INECP)

***Mission** – Prevent proliferation by working with governments worldwide to develop effective national systems of nuclear export control*

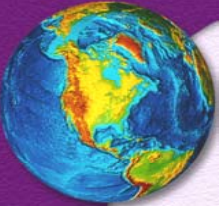
In cooperation with other DOE programs and the US interagency,* INECP:

- ➡ Helps build indigenous export control systems through technical exchanges and training
- ➡ Cultivates sustainability of systems through training and updates with export control experts and enforcement specialists
- ➡ Demonstrates to partner countries the imperative of inter-agency cooperation to export control system success

***INECP Interagency Partners:**

- ✓ State Department: Export Control & Border Security (EXBS) Program
- ✓ Commerce Department: legal, regulatory and industry compliance programs
- ✓ DHS (US Customs)/Defense Department (Defense Threat Reduction Agency): enforcement training.





Fundamentals of Effective Export Controls

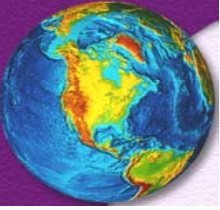
The work of INECP is focused on improving nuclear export controls by working with cooperating countries to improve the three core elements of each country's export control systems:
Licensing Procedures and Practices, Industry Compliance, and Enforcement



- **Improve Licensing Procedures and Practices**
- create transparent and standardized national licensing systems and competent technical reviews of proposed transfers of nuclear-related materials, equipment, and technologies.

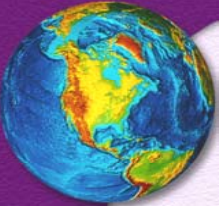
- **Promote Industry Compliance** - promote industry use of internal compliance programs and other tools-of-the-trade to reinforce export control “best practices” at facilities that produce nuclear-related commodities

- **Strengthen Enforcement Capabilities** - provide training and tools that enable customs personnel, border guards, and other officials in partnering countries to enforce their national nuclear export control requirements.



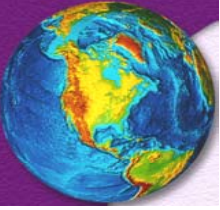
INECP: Improving Licensing Procedures and Practices

- Assist with creation and implementation of nuclear-related legal regulatory requirements
- Provide training to government representatives and technical communities on U.S. and international nuclear export control & nonproliferation processes and norms
- Fund indigenous development of necessary tools
 - Databases & computers for storing and analyzing licensing data
 - Publications & handbooks, including Nuclear Suppliers Group guidelines and control lists
 - Secure communication systems, which provide convenient and speedy transmission of licensing information between licensing bodies and technical reviewers



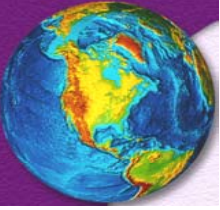
INECP: Improving Licensing Procedures and Practices

- Work with partner governments to identify and train technical experts on the elements and details of nuclear export control
- Fund partner governments' education outreach to domestic nuclear industry through site-specific and regional workshops
- Workshops cover national and international export control laws, policies, regulations, norms, catch-all controls, intangible technology transfers, end use and end-user analysis
- Workshops encourage compliance by nuclear exporting companies and enterprises
- Workshops establish relationships between federal agencies, export control technical specialists and exporters, improving industry understanding and compliance



INECP: Strengthening Enforcement Capabilities

- Assist establishment of competent methods of preventing illicit transit of nuclear materials and equipment
- Partner with U.S. Departments of State, Homeland Security/Customs, and Defense international assistance and export control & border security programs
- Promote routine communications between enforcement officials and licensing officials/technical experts through regulatory development and the provision of communication systems and databases
- Provide and sponsor nonproliferation awareness and commodity identification training by technical experts for enforcement officials (see next page)
- Provide tools and equipment
 - Handbooks, & Publications



INECP: Strengthening Enforcement Capabilities

- *Regular and systematic refresher and new recruit training on nuclear proliferation and commodities*

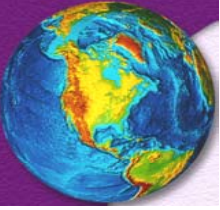
Inspectors
Sensitive to and able to identify nuclear-related materials and equipment
Security Police
Target shipments of concern

- *Procedures for accessing technical and analytical support*
- *MOU, regulatory mandate*

Training Academy
Curriculum covers nuclear-related materials and equipment

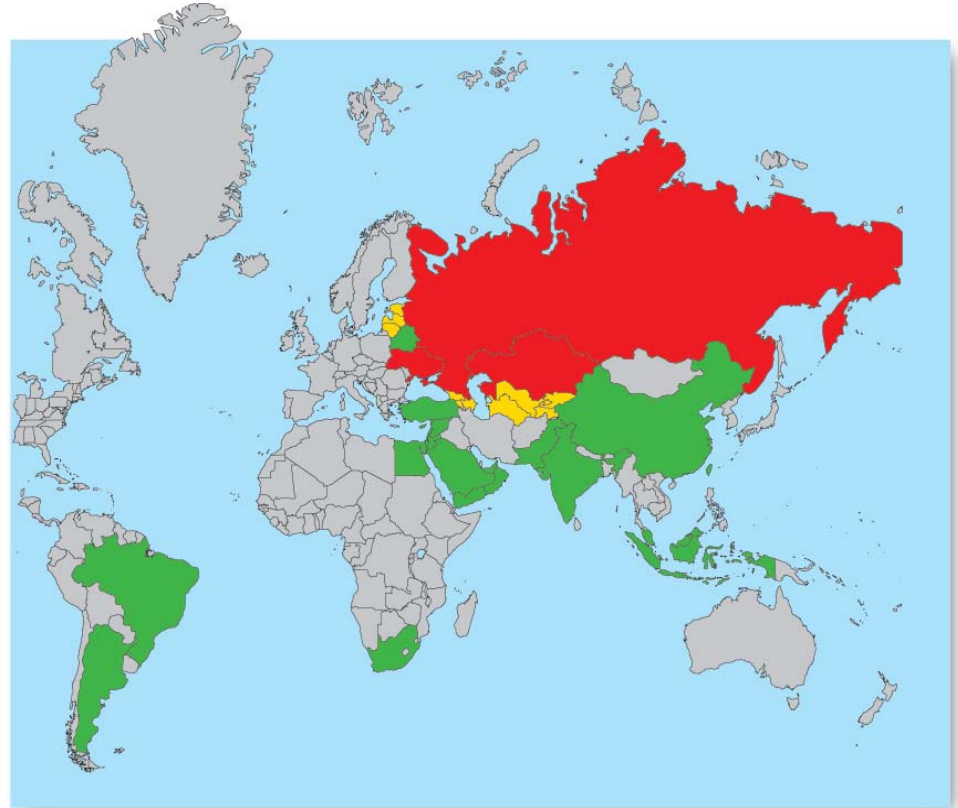
Technical Experts
Trained, prepared, and equipped to assist with identification of intercepted items

- *Curriculum development*
- *Instruction*

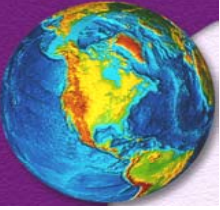


Looking Ahead

- Accelerate implementation in Russia, Ukraine, and Kazakhstan
 - Sustain progress through indigenous training by core groups
 - Assure technical review of nuclear export licenses
 - Continue to develop and implement supplier awareness programs
- Expand efforts in Baltics, Caucasus, and Central Asia
 - Provide nuclear expert support to customs and law enforcement agencies
 - Make cooperation part of a broader US Government export control and border security support package
 - Get other donor states, regional groups, and multilateral organizations involved
- Start work in other high priority supplier and transit countries in South Asia, the Middle East, East Asia, and Central Europe.



- Maturing Cooperation
- Expanding Assistance
- Future Priorities



Scope of INECP Expansion

◆ Licensing Procedures and Practices

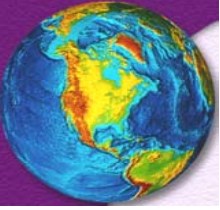
- Technical Guides (Russia, Ukraine, Kazakhstan)
- Document Management System (Russia)
- STORKE (Kazakhstan) and NELRS (Ukraine)
- Strengthening licensing procedures: Turkey Taiwan (forthcoming)
- Export controls for government nuclear facilities (Pakistan forthcoming)

◆ Government Outreach to Industry

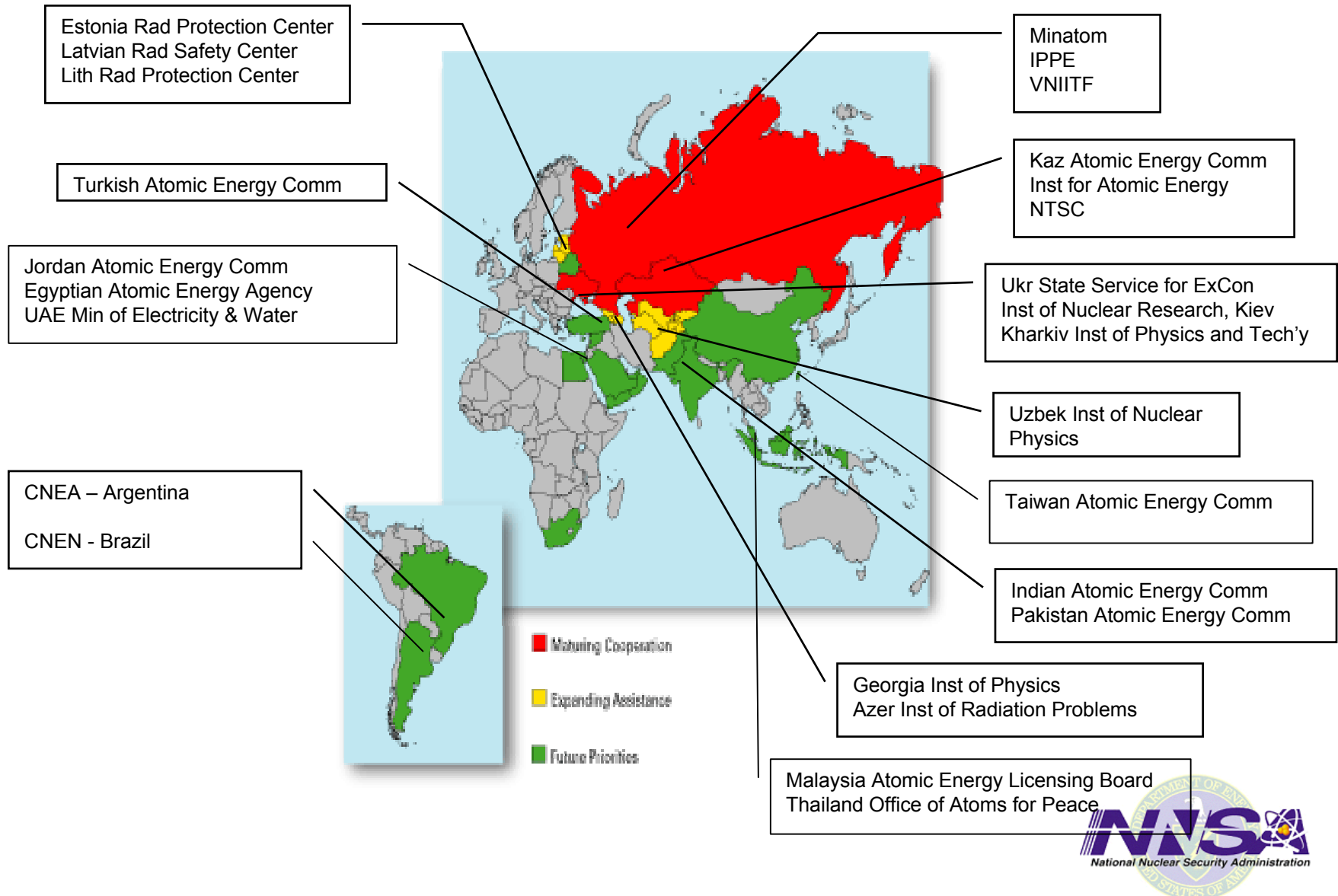
- Site-specific/Regional Workshops (Russia, Ukraine, Kazakhstan '03; Baltics, Taiwan, Turkey forthcoming)

◆ Enforcement

- Commodity Identification Training (Caucasus, Baltics, Ukraine, Kazakhstan in '03; Taiwan, Turkey, UAE, Jordan forthcoming)
- Training nuclear technical experts in analysis and in adapting Commodity Identification Training to national circumstances (Caucasus, Baltics, Ukraine, Kazakhstan in 03; Taiwan, Turkey forthcoming)
- VisionVest (late-'03 beta test in the Baltics)
- Secure regional information-sharing system (Central Asia and Caucasus Regional Transit Agreement)



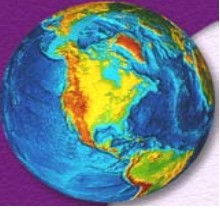
INECP Builds Technical Partnerships With Foreign Nuclear Institutes





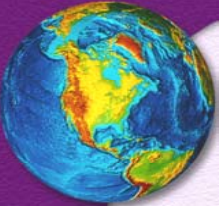
National Nuclear Security Administration

Forward Thinking



Forward Thinking

- Following the events of September 11, there is a renewed emphasis on nonproliferation of weapons of mass destruction (WMD)
- INECP team is building relationships with and providing training for customs officials in Central Asian countries of Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan, Azerbaijan, Georgia, Armenia, and Turkey
- INECP is using data from past PRAP studies and sponsoring new studies and open-source NGO analyses in order to better measure INECP progress, and in order to target better INECP program resources



Forward Thinking

- Missile technology and chemical/biological dual-use reviews commenced (FY'03)
- Develop outreach to U.S. industry on WMD through U.S. Customs Shield America briefing program
- Develop capability to assess U.S. export trends in critical commodities
- Develop proactive analytical capability through PRAP to assess and provide prognosis on foreign WMD proliferation initiatives and developments



National Nuclear Security Administration

THE END